Governance assessment tool – Institutional capacity

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1. Introduction: Resource regimes

For the assessment of the institutional capacity in water governance we make use of the concept of resource regimes. Resource regimes are considered as social institutions which have an effect on the stock and the yield of the natural resource. Resources provide different goods and services as a yield. Resources give rise to either direct use (e.g. as input factors in production processes or the direct consumption option), indirect use (e.g. adsorption sink for pollutants, ecosystem services) or immaterial use (e.g. in the form of landscape, amenity, aesthetic, cultural values) by people. The concept resource regime advocates that the management and preservation of a natural resource should be understood not only in terms of public management (top down), but also in terms of civil or social action and selfregulation by society on the basis of property and use rights (bottom up). Water uses are influenced not only by policy interventions, but also by the rights that have been established. Therefore, resource regimes are considered as social institutions in which the public and private domains interact with each other. (Coase, 1960; Young, 1982; Ostrom, 1990; Bromley, 1991; Young, 1992; Crawford & Ostrom, 1995; Knoepfel, Kissling & Varone, 2001; Bressers & Kuks, 2001; Kissling & Kuks, 2004).

In fact, the essence of water governance is that its focus is not only on public intervention, but also on self-organisation as a way to deal with water issues. It combines a top down perspective from governmental agencies with the bottom up perspective of stakeholders having an interest in water management. There are lots of examples of bottom up organizations in water management. Many of them have a long history of self-organisation, like the 'Waterschappen' in the Netherlands, the 'Wateringues' in Belgium (Wallonia), the 'Wasserbehörde' and 'Wasserverbände' in Germany, the 'Agences de l'Eau' in France, the 'Confederaciones Hidrográficas' and the 'Tribunales de las Aguas' in Spain, or the organisations for water irrigation (Les Bisses/Suonen) in Switzerland (Canton of Wallis). But also outside Europe, we can find many of such bottom up organisations, for instance the Water Management Districts in the American state of Florida (Kuks & Bressers, 2003). Ostrom (1990) emphasises in her book 'Governing the Commons' the importance of regional and local institutional arrangements (common pool resource arrangements) which are often based on a long tradition of informal but commonly shared water rights. In Europe, Barraqué (1995, 1998) made an analysis of the influence of water rights on the administration in various European countries. He remarks that the local character of "customary institutions makes them less visible to those who primarily focus on legal; systems or regulations at State level" (Barraqué, 1998: 353-354). In their book on water use principles in the Middle East, Allan and Mallat (1995) remark that such water use principles are often based on old Islamic rules and customs. "Water in these regions tells the story of society and its modes of being shared are still today a real document on social order" (Allan & Mallat, 1995: 6-9). However, self-regulation often takes place in "the shadow of hierarchy" (Scharpf, 1997), which means in the context of the possibility of public intervention. Generally speaking, self-regulation does not only result from "laissez-fair" but can also result from the credible alternative threat of public intervention.

2. Regime dimensions

We use ‘resource regimes’ and ‘governance regimes’ as equivalent concepts. Assessment of a governance regime should be based on identifying the regime and evaluating the regime with criteria. For the identification of a regime we distinguish five dimensions:

1. Levels and scales (not necessarily administrative levels): governance assumes a general multi-level character of all other dimensions.
2. Actors and their networks: governance assumes the multi-actor character of the relevant network(s).
3. Perceptions of the problem and goal ambitions (not just the objectives): governance assumes the multi-faceted character of the problems and ambitions.
4. Strategies and instruments: governance assumes the multi-instrumental character of the strategies of the actors involved.
5. Resources and organization of implementation: governance assumes the complex multi-resource basis for implementation.

These five dimensions have been elaborated on the basis of a variety of classics in policy studies literature (for an overview see: Bressers & Kuks, 2001, 2003). They make also sense if we consider the concept of ‘institutional sustainability’ as introduced by the EU Water Framework Directive. In 2000 the European Union adopted the Water Framework Directive to streamline the EU's large body of water legislation into one overarching strategy. The Water Framework Directive imposes a general requirement for ecological protection and a minimum chemical standard for all surface waters. The key element of the directive is the introduction of a model for water management based on 'river basins', or geographical areas, rather than on administrative or political boundaries. The key aims of the Directive are:

- Expanding the scope of water protection to all waters, surface waters and groundwater.
- Achieving "good status" for all waters by a set deadline.
- Water management based on river basins (following the example of e.g. Maas, Rhine and Scheldt across-the-borders river basins management).
- "Combined approach" of emission limit values and quality standards.
- Getting the prices right (adequate water pricing acts as an incentive for the sustainable use of water resources).
- Getting the citizen involved more closely;
- Streamlining legislation (replacing seven old water directives).

In fact, the institutional sustainability criteria in the European Water Framework Directive fit quite well with the five dimensions of governance we distinguish:

1. *Levels and scales*: water management at river basin scale.
2. *Actors and networks*: getting the citizen and all users involved more closely (participation).
3. *Perceptions and ambitions*: expanding the scope and achieving “good status” for all water bodies.
4. *Strategies and instruments*: streamlining legislation and combined approach (integration).
5. *Responsibilities and resources for implementation*: getting the prices right (redistribution of costs).

Thinking of ways to develop a governance regime towards more institutional sustainability, one could think of the following directions for institutional change:

1. Restructuring levels and scales (positioning the river basin level and organizing water management based on watershed boundaries);
2. Involving new actors (developing participatory arrangements for involvement of all users and stakeholders with an interest);
3. Reformulating the policy problem (developing an integral vision including all water values);
4. Integrating policies (using integrated water legislation, integrated planning and integrated water resource management);
5. Redistributing resources (limiting property and use rights, internalizing costs, full cost recovery).

An analytical framework based on these five dimensions has been applied for national regime studies in the Netherlands, Belgium, France, Spain, Italy, Switzerland (Kissling and Kuks 2004, Bressers and Kuks 2004, 2006), the United Kingdom (Kuks 2005), Greece (Kampa and Bressers 2008), Romania (Vinke-de Kruijf, Kuks and Augustijn 2010), Palestina-Gaza (Zoarob and Bressers 2007)and Vietnam (De Boer, Bressers and Filatova 2010; Kuks 2012).

3. Regime qualities

Besides the identification of a regime, an assessment asks for qualification of a regime. In literature on resource regimes various authors advocate the relevance of 'extent' and 'coherence' as assessment criteria (Young, 1982; Knoepfel et al. 2001; Kissling and Kuks, 2004).

a. The *extent* of a regime refers to the scope of issues taken into account, the completeness and the comprehensiveness. The extent of a regime concerns its inclusiveness with respect to all uses or values related to a water resource.

b. The *coherence* of a regime refers to the degree to which the various elements of the regime are strengthening rather than weakening each other. Paying attention to more separate issues only adds to complexity and fragmentation when it is not accompanied by thoughtful connections. Young (1982) argues that resource regimes need to be accompanied by administrative organizations and policies, especially to cope with problems of interpretation and dispute settlement.

When the challenge is not to keep the water system in a stable sustainable status, but to change it to adapt to changing situations like population growth and climate change, water management will further increase in complexity and dynamics, to the point that any linear plan and realize approach is doomed to fail. Adaptive water management in practice is then essential. But the necessary adaptiveness comes with additional governance regime requirements. When the regime is for some part rigid in what it required, for instance by detailing various sub-goals and timeframes, the degrees of freedom for water management in practice may shrink to unworkable conditions. Water management processes in practice require applying "adaptive boundary spanning strategies" (Bressers and Lulofs 2010). To enable these, the governance regime should not only have sufficient extent and coherence, but also provide sufficient flexibility (De Boer 2012).

c. The *flexibility* of a regime refers to the degree to which the regime elements support and facilitate adaptive actions and strategies in as far as the ambitions are served by this adaptiveness (De Boer and Bressers 2011). Consequently it is also the degree to which hindrances for such adaptive

behavior are avoided. The addition “in as far as” is needed to discern implementation that is just weak from a genuine attempt to make the most of the situation.

Given the dynamic and change oriented nature of some policies, like river renaturalization, there is yet another regime quality that can be influential for the practical process. That is the obvious, but no less important aspect of intensity.

d. The *intensity* of a regime refers to the degree to which the regime elements urge changes in the status quo or in current developments. Intensity is related to the size of the task to create new dynamics by creative cooperation, or conflict. Consequently this urges change of conservative motivations or overcoming them by power, changing cognitions including widening of boundary judgments regarding the issues at stake, and developing new availabilities and combinations of resources. In other words: with more intensity the urge to use cleaver adaptive strategies to deal with and change the setting of the process increases. On the other hand, inevitably there will be some limitations to flexibility induced by an increase in intensity, in ambitions and stimuli to further change.

We identified four qualities that are important to be assessed while analyzing the aptness of a governance regime in a certain situation: extent, coherence, flexibility and intensity. These criteria qualify the regime in terms of its impact on real life processes. The four mentioned qualities of governance can be applied to all five elements of governance. This then creates a matrix of issues that are relevant for the degree to which the governance context guides and facilitates effective water management processes in practice.

4. Questionnaire for regime assessment

A combination of the five regime dimensions and the four regime qualities has been operationalized into the following questionnaire. The questionnaire is also available as a matrix scheme (see Appendix 1).

1. Multi-level governance

There is not one only level of government, but many layers of government on national, regional/provincial and local scale.

What are important questions to discuss?

- In terms of *extent*: How many levels are involved and dealing with an issue? Are there important gaps or missing levels?
- In terms of *coherence*: Do these levels work together and do they trust other between levels?
- In terms of *flexibility*: Is it possible to move up and down levels (up scaling and downscaling) given the issue at stake?
- In terms of *intensity*: Is there a strong impact from a certain level to change behaviour?

2. Multi-actor governance

Actors that are involved do mostly not act on their own, but also on behalf of backbenchers or interest groups behind them which they represent. It is relevant to consider the network linkages around actors and the coalitions that exist.

What are important questions to discuss?

- In terms of *extent*: Are all relevant stakeholders involved? Who are excluded?

- In terms of *coherence*: What is the strength of interactions between stakeholders? In what way are these interactions institutionalised in joint structures? What is the history of working together, is there a tradition of cooperation?
- In terms of *flexibility*: Is it practised that the lead shifts from one actor to another?
- In terms of *intensity*: Is there a strong impact from an actor or actor coalition on water management?

3. Multi-perspective governance

Different actors have different perspectives on a policy problem. There are various discourses in which groups of actors perceive and discuss a problem. Also goal ambitions vary among actors.

What are important questions to discuss?
- In terms of *extent*: To what extent are the various problem perspectives taken care off?
- In terms of *coherence*: To what extent do the various goals support each other, or are they in competition?
- In terms of *flexibility*: Are there opportunities to re-assess goals?
- In terms of *intensity*: How different are goal ambitions form the status quo?

4. Multi-instrument governance

To be effective, it is necessary to have a strategy for goal achievement, including a variety of policy instruments to be applied.

What are important questions to discuss?
- In terms of *extent*: What types of instruments are included in the policy strategy?
- In terms of *coherence*: To what extent is the resulting incentive system based on synergy?
- In terms of *flexibility*: Are there opportunities to combine or make use of different types of instruments? Is there a choice?
- In terms of *intensity*: What is the implied behavioural deviation from current practice and how strongly do the instruments require and enforce this?

5. Multi-resource governance

It is not sufficient to have a policy strategy on paper. It needs implementation to become effective. Implementation often takes place at another, lower level of government. The effectiveness depends on the responsibilities (competences, mandates) that are assigned and on the resources that are available at or provided to that lower level of government. Important resources are: authority, trust, property rights, financial means, organisational capacity, human resources, expertise, information and knowledge, time.

What are important questions to discuss?
- In terms of *extent*: Are responsibilities clearly assigned and sufficiently facilitated with resources?
- In terms of *coherence*: To what extent do the assigned responsibilities create competence struggles or cooperation within or across institutions?
- In terms of *flexibility*: What is the flexibility within the assigned responsibility to apply resources in order to do the right thing in an accountable and transparent way?
- In terms of *intensity*: Is the amount of applied resources sufficient for the intended change?

5. Regime dynamics: pressure points and doorstep conditions

The questionnaire in the previous section helps us to make a regime assessment of the *static situation* and the *dynamics*.

- In the matrix we could assess each matrix cell for instance with the help of a smiley (ordinal scale), expressing the quality of the regime in terms of high/medium/low extent, coherence, flexibility, intensity on each of the five dimensions.
- We can also assess the dynamics in each matrix cell with the help of an arrow up or down, to express if the situation is improving or endangering.

Such an assessment will result into quick scan conclusions for improvement of the governance regime in a specific country or setting. Appendix 2 gives an example of such quick scan conclusions for the governance regime of the Mekong Delta in Vietnam. These conclusions have been adopted in the first draft of the Mekong Delta Plan in Vietnam.

For a further *feasibility assessment* of quick scan conclusions it makes sense to focus the analysis on triggers, drivers or pressure points that press the governance regime towards change. Furthermore, it is important to be aware of the mechanisms or conditions that determine if and how change will take place.

- Triggers of *pressure points* can be classified according to the type of context where they stem from. Bressers & Lulofs (2010) distinguish in their Contextual Interaction Theory:
    - The specific context (previous decisions, specific circumstances or cases).
    - The structural context (the five dimensions of a governance regime).
    - The wider contexts (problem context, political context, economic context, cultural context, technological context).
- Whether change will happen or will be inhibited depends on mechanisms or conditions that determine the effect of triggers or pressure points. For instance, North, Wallis and Weingast (2009) identified *doorstep conditions* that determine if a natural state will begin a transition towards an open access order. We distinguish three path dependency mechanisms that create stability in a regime, which beyond a certain point can also be pathways for changes (Bressers & Kuks, 2001; Kuks, 2004). These mechanisms function as doorstep conditions that are favourable or not favourable for regime change.
    - A dominant set of values (motivation).
    - A dominant cognitive frame of reference (cognitions).
    - A dominant power configuration (mutual dependencies between actors).

Dominant set of values

This first doorstep condition arises from the tendency of actors to act from a set of constant and coherent values (objectives: ‘will’; normative component). In our comparative study of national water regimes in six European countries (Kissling and Kuks, 2004) we found indications that the following values and value-based institutions are in favour of an integrated water resource regime:

- A strong value placed on community spirit, including willingness to restrict individual autonomy to achieve equitable distribution of water access rights.
- Common adherence to the polluter pays principle and the principle of full cost recovery.
- A cooperative policy style (with participatory values), including openness of the water policy community to rival interests.

- A strong environmental awareness in society, including a protective orientation and openness of the legal system to 'protective interests'.

On a more specific case level (Bressers and Kuks, 2004) we found indications for the relevance of a 'tradition of cooperation':

- A dominant policy ideology that supports integration.
- Positive examples of integration known by the actors involved.
- Mutual respect and trust in 'fair play' by the actors involved.

Dominant cognitive reference frame

This second doorstep condition arises from the tendency of actors to use a common reference frame to interpret cognitions (information: 'knowledge'). In our comparative study of national water regimes in six European countries (Kissling and Kuks, 2004) we found indications that the following paradigms and cognition-based institutions are in favour of an integrated water resource regime:

- A common understanding of water problems in terms of resource sustainability and not in terms of isolated problems that can be resolved with curative solutions (treatment of the symptoms).
- A water planning tradition and the presence of a supportive learning system (in the sense of national statistics, science and research).
- The ability to adapt existing water institutions to an expanding extent (to innovate within existing water institutions and broaden their scope).

On a more specific case level (Bressers and Kuks, 2004) we found indications for the relevance of 'joint problems and joint opportunities':

- Common knowledge bases from respected sources on problems and opportunities.
- Information symmetry between the actors involved on these points
- A sense of responsibility for the future with the actors involved and a sense of respect for each other's interests among the actors involved.

Dominant power configuration

This third doorstep condition arises from the dependence of actors on each other's resources (power: 'ability'). In our comparative study of national water regimes in six European countries (Kissling and Kuks, 2004) we found indications that the following indicators of a power configuration are in favour of an integrated water resource regime:

- A tradition of effective co-governance between central and decentral authorities (in which central authorities take responsibility for integration and decentral authorities are equipped with sufficient resources for the implementation and the differentiation to specific circumstances).
- A tradition of citizen participation and public debate on water issues (in which participation is not restricted to general elections, but in which participation rights are instituted regarding water policy making and planning).
- A strong environmental policy sector (with environmental divisions at all administrative levels and environmental subdivisions in all relevant ministries and water administrations).
- A strong position of 'green' NGOs.
- Free and alert mass media to induce awareness of challenges to the system.

On a more specific case level (Bressers and Kuks, 2004) we found indications for the relevance of 'institutional interfaces':

- Clarity of assigned responsibilities (to prevent territorial battles).
- Legal or practical possibilities to protect negotiated compromises from continuous litigation.
- Actors, independent or within the administration, with solely process objectives (brokers).
- We also found indications for the relevance of a socalled 'credible alternative threat':

- Sufficient imbalance of power favouring a dominant actor (government?) to enable unilateral action.
- Information on alternative options to ‘solve’ the problem from the perspective of the dominant’s actor’s perspective.
- Alternative option has more severe consequences for the other stakeholders than the specific form of integration would have.

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Appendix 1:
Questionnaire for regime assessment

Governance dimension	Quality of the governance regime			
	Extent	*Coherence*	*Flexibility*	*Intensity*
Levels and scales	How many levels are involved and dealing with an issue? Are there any important gaps or missing levels?	Do these levels work together and do they trust other between levels?	Is it possible to move up and down levels (upscaling and downscaling) given the issue at stake?	Is there a strong impact from a certain level to change behaviour?
Actors and networks	Are all relevant stakeholders involved? Who are excluded?	What is the strength of interactions between stakeholders? In what way are these interactions institutionalised in joint structures? What is the history of working together, is there a tradition of cooperation?	Is it practised that the lead shifts from one actor to another?	Is there a strong impact from an actor or actor coalition on water management?
Problem perspectives and goal ambitions	To what extent are the various problem perspectives taken care off?	To what extent do the various goals support each other, or Are they in competition?	Are there opportunities to re-assess goals?	How different are the goal ambitions from the status quo?
Strategies and instruments	What types of instruments are included in the policy strategy?	To what extent is the resulting incentive system based on synergy?	Are there opportunities to combine or make use of different types of instruments? Is there a choice?	What is the implied behavioural deviation from current practice and How strongly do the instruments require and enforce this?
Responsibilities and resources	Are responsibilities clearly assigned and sufficiently facilitated with resources?	To what extent do the assigned responsibilities create competence struggles or cooperation within or across institutions?	What is the flexibility within the assigned responsibility to apply resources in order to do the right thing in an accountable and transparent way?	Is the amount of applied resources sufficient for the intended change?

Appendix 2:
Quick scan conclusions for the water governance regime in the Mekong Delta in Vietnam

Included in chapter 6 of the Mekong Delta Plan V0.1 (March 2012).
Approved by the Strategic Advisors Team (Cees Veerman, Louise Fresco, Marcel Stive, Han Vrijling, Pavel Kabat, Stefan Kuks).

Long term vision based water management in the Mekong Delta takes into account how climate change might affect use functions in the delta. This Mekong Delta Plan aims to provide such a long term vision. It identifies what basic choices have to made to improve the socio-economic development of the Delta, given the impact of climate change as a circumstance. But having such a plan is not enough. To implement the plan in an effective way, it is necessary to institutionalise the way of thinking and the way of working on which this plan is built. It is crucial to organise a strong form of coordination at the scale of the entire river basin and delta area on the Vietnamese side. Therefore, in this chapter we want to elaborate on the delta coordination that is needed to bring the Mekong Delta Plan into practice in an effective way. It is a reflection on the water governance in the Mekong Delta of Vietnam.

If we apply an assessment tool for water governance in the Mekong Delta in Vietnam, and make a quick scan, than we come to the following main conclusions. These conclusions have been approved by the High Level Meetings for the Mekong Delta Plan in 2010 and 2011 in Hanoi and HCMC.

1. Coordination needed at river basin scale

The scale of the river basin in Vietnam, the entire delta, covers 13 provinces. These provinces all have their own policies with respect to land use functions and water management in the Delta. The provinces are implementing national policies along sectoral lines, like agriculture and rural development (Mard), natural resources and environment (Monre), construction (MoC), transport (MoT). Integration of sectoral policies should take place at the national level, but this does not function sufficiently. Integration of sectoral lines at provincial level is rather weak. So, interpolicy cooperation at national and provincial level is insufficient and causes fragmentation. An integrated approach of land use functions requires coordination among the disciplinary organised ministries and departments. Land use planning is too much dominated by agriculture and the emphasis on rice production, which hinders crop rotation. Lands use functions are rather inflexible due to inflexible property rights and land use rights. Coordination between the 13 provinces is also lacking, they don't have sufficient orientation on each other to achieve for instance a good coordinated approach of upstream and downstream water problems. The provincial orientation is too much top down, which means focus on implementation of agreements with national ministries, and too little on taking responsibility for delta problems that pop up in a bottom up perspective from the delta itself.

Following this reasoning, improvements can be made in the following ways:

- Coordination among the 13 provinces (upstream-downstream coordination). Organise a platform on which the 13 provinces can meet each other on Delta matters. Stimulate that they develop more orientation on each other, of course within national policy frames. An integrated approach on the relation between upstream and downstream matters is needed. Relevant matters to consider are flooding, drought and water shortage, salinity.

- Coordination of use functions (interpolicy coordination). Stimulate provincial policy makers to broaden the scope and stimulate them to develop comprehensive visions in which related aspects from Mard-, Monre-, MoC- and MoT-policies are taken together. An integrated approach on the relations between various use functions is needed. Relevant use functions to consider are agricultural and rural development, urban and infrastructural development, environmental and natural resource functions. Interpolicy coordination should result in the allowance of more flexibility in land use functions and land use rights.
- Cross border coordination. Development of a better coordination at the scale of the Mekong Delta in Vietnam will strengthen the international position of Vietnam in relation to the upstream countries along the international Mekong river basin. With international help from abroad (for instance with the help of experts at Clingendael Institute in The Netherlands or at IIASA in Austria) the ability to work on water diplomacy could be improved.

2. Stakeholder representation and governmental authorisation needed at river basin scale

Water governance in the Mekong delta is not only a matter for governmental bodies. Also non-governmental bodies or stakeholders with an interest should have the opportunity to be involved. This is needed to achieve a comprehensive vision on people's needs. Ideally speaking, all water users, user groups and use functions in the Delta should have a chance to make their argument in the coordination at river basin scale. The coordination at river basin scale should be aimed at dealing with rivalries between users and user functions. It should include conflict prevention and resolution mechanisms. It must be organised as a collective choice arrangement. On the other hand, such an arrangement needs governmental authorisation. In the Vietnamese governmental system it is the People's Committee that functions as the political body or assemble that could provide such authorisation. If we exclude the option of a special People's Committee at the level of the entire Mekong Delta, we can think of authorisation from a People's Committee at another level in the existing structure, or provincial level, or national level. To achieve an integrated and powerful approach, it would be better to think of authorisation from the national level.

Following this reasoning, improvements can be made in the following ways:
- Stakeholder representation at river basin scale. Organise a stakeholder platform at river basin scale on which stakeholders can make their argument, on which rivalries will be debated and identified, and on which collective choices, that are to be made for the Mekong Delta, will be prepared.
- Governmental authorisation at river basin scale. Organise strong leadership in collective choice decision making at river basin scale, to be authorised and anchored by the national government. Strongly recommended is to create position for a Delta Commissioner that takes leadership in decision making, but based on processes in which stakeholders are consulted. Such processes are to be set up and facilitated by the Delta Commissioner and his staff. It is also strongly recommended that the Delta Commissioner takes office in the Delta area itself instead of in the capital Hanoi.

3. Responsibilities and resources needed at river basin level

The coordinating authority at river basin scale should not be a standalone authority. It is important that is embedded in the Vietnamese governmental system with clear linkages to the national level as well to the provincial and local

levels within the Mekong Delta area. Furthermore, the coordinating authority should be able to combine large scale coordination with small scale operation. And the authority will only be powerful if it can make use of sufficient financial means. Such means are necessary to set up a well equipped organisation with good expertise, to be an attractive employer for well-educated experts, to organise sufficient information that is needed to support the right measures. We know that already a South Western Coordination Authority (Ban Chi Dao Tay Nam Bo) for the Mekong Delta exists. However, this coordinating body lacks the resources that are needed for effective coordination. It also lacks the requirements for an effective Delta coordination as described above.

Following this reasoning, improvements can be made in the following ways:

- Assign sufficient responsibilities to the Delta Commissioner and its coordinating authority for the Mekong Delta. The authority should be able to guide stakeholder processes, to guide the process that should lead to powerful collective choices, to guide provincial and local decision makers, to guide redistributions of property and (land)use rights, to control progress and take the right measures for effective operations.
- Provide a system through which the coordinating authority could build up financial funds. Water governance in the Mekong Delta cannot sufficiently rely on international funds. It should get sufficient budget from internal sources within the country. In general, one could think of two systems. One system is based on cost recovery through a profit principle. This means that those who have an interest in water governance and profit from it, also pay for it (think of recovery by use functions who profit through economic development). Such an option should be based on equal and fair distribution of risks, benefits and costs. Another system is based on cost recovery through a solidarity principle. This means that the costs of water governance are recovered form the national budget or provincial budgets. The Ministry of Planning and Investment (MPI) plays a crucial role in this option: water governance and delta measures should be approved than by that ministry.
- Set up an organisation at river basin level with sufficient organisational capacity. Such an organisation should be able to invest in human resources. It should be an attractive employer where well-educated experts want to work, and where they are sufficiently paid. It should be an organisation that is sufficiently equipped to manage large scale coordination activities as well as small scale operations in the Delta.
- Set up management of information resources. Not only the availability of data needs attention (there are still many white spots), but also the accessibility of data (institutions possessing data don't have an open data policy). Sufficient data, rights data, access to data are crucial for the success of Delta coordination. It should be based on systems for forecasting, monitoring, evaluation, policy learning.